

**From:** [Kristen Keteles](#)  
**To:** [jacki](#)  
**Bcc:** [Barbara Barron](#); [Joshua Rickard](#)  
**Subject:** Re: Germanium concern  
**Date:** 11/24/2010 10:43 AM

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Very sorry to hear about your severe health problems. Please continue to work with your physician and be sure to seek care for your symptoms. I alerted the Agency on Toxic Substances and Disease Registry (ATSDR) regarding your case and am inquiring with our Regional ATSDR Environmental Health Physician. I have a few questions for you. Have you received any results of the water tests and also what are yours and your husband's blood arsenic levels? Have you had any hair or finger nail analyses done? I would also like to know what chemicals they looked for in your blood. For example did they also test for mercury? What are your (both you and your husband's) occupations? Finally, do any of your neighbors have similar health problems and have any of them had their blood tested?

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email: Keteles.Kristen@epa.gov

▼ "jacki" ---11/24/2010 09:29:29 AM---Yes these can be confirmed in myself and my husband and also very high arsenic levels, this was rep

From: "jacki" <jboid@dia.net>  
To: Kristen Keteles/R8/USEPA/US@EPA  
Date: 11/24/2010 09:29 AM  
Subject: Re: Germanium concern

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Yes these can be confirmed in myself and my husband and also very high arsenic levels, this was reported to state health dept in ND. We have done extensive water testing, and also state water dept has done testing. We have ruled out food or supplements, as none are taken. Health problems are getting critical, I have been taken to ER once because I could not breath. I have lost muscle control and have problems walking and with hands.

----- Original Message -----

From: <Keteles.Kristen@epamail.epa.gov>  
To: <jboid@dia.net>  
Cc: <Rickard.Joshua@epamail.epa.gov>; <jsemerad@nd.gov>; <Barron.Barbara@epamail.epa.gov>  
Sent: Wednesday, November 24, 2010 9:50 AM  
Subject: Germanium concern

>  
> Dear Ms. Schilke,  
>  
> I received your inquiry concerning elevated germanium blood levels.

> Your email reported a blood level of 52mcg/ml, Typically  
metal blood  
> levels are reported in micrograms per deciliter. Can you  
confirm the  
> concentration from your lab results?  
>  
> Germanium is not considered toxic (of course anything in high  
enough  
> amounts can be toxic). In fact, at one time germanium was  
used in  
> supplements because it was believed to prevent cancer.  
However, as I  
> mentioned anything in a high enough amount can be toxic and  
people that  
> had taken the supplements often experienced adverse health  
effects such  
> as heart problems. and kidney damage. People that  
experienced symptoms  
> of germanium toxicity were either exposed to high levels by  
taking  
> supplements or through occupational exposure. Germanium occurs  
> naturally in bedrock and can be present in well water and is  
also  
> present in very low amounts in food, particularly brans,  
legumes, and  
> tomatoes. Most people are exposed to very small amounts in  
food. If  
> you are on private well water, I would recommend having your  
water  
> tested to determine if the source is through the well water.  
>  
> With your elevated germanium blood levels, I am curious if you  
are  
> experiencing any symptoms such as fatigue, weight loss, muscle  
weakness?  
> Also has your physician checked your kidney function? I would  
be happy  
> to talk to you further about this issue or any concerns about  
exposures.  
>  
> Best,  
>  
> Kristen Keteles, Ph.D.  
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